

REMARKS

Claims 1-39 were previously pending in this application. By this Amendment, claims 4 and 14 have been amended, and new claims 40-42 have been added.

Applicants thank the Examiner for the telephone interview conducted on February 20, 2004. The substance of discussions during the interview are incorporated into the following remarks.

I. Claims 1-39 Define Patentable Subject Matter

Claims 1-39 are rejected under 35 U.S.C. §102(b) as being anticipated by Reese et al. (U.S. Patent No. 5,976,010). These rejections are respectfully traversed.

A. Claims 1-27

Applicants assert that the patentability of independent claims 1, 18 and 19 may be discussed as a group, in light of the similarities in their claim limitations. For example, claims 1, 18 and 19 each recite that a ventilated environment includes at least a first room and a second room ventilated by a common source of supply air, the first room having drawn therefrom first return air that constitutes a first portion of air return to the ventilated environment as at least some of the supply air, the second room having drawn therefrom second return air that constitutes a second portion of the air returned to the ventilated environment as at least some of the supply air. Also, claims 1, 18 and 19 recite independently controlling at least one of a first flow of the first return air and a second flow of the second return air based at least on a contaminant level of the at least one contaminant in at least one of the first room and the second room.¹

Applicants respectfully submit that Reese does not teach or suggest all of the limitations of each of claims 1, 18 and 19.

Reese discloses an air handling system which may be used to lower the concentration of contaminants in a space or zone in one of the following three ways: **Mode 1** – provide only primary air to the space or zone; **Mode 2** – provide only secondary air to the space or zone; and

¹ As used in the claims, the terminology of “at least one of A and B” is intended to mean “A, or B, or (A and B).” For example, in claim 1, independent control of the first return air only, or the second return air only, or both the first and second return airs can be performed.

Mode 3 –provide a combination of primary and secondary air to the space or zone. See col. 7, lines 13-17 of Reese. Primary air is “typically a mixture of outdoor air and return air which has already been previously applied to and circulated through the building,” and return air “is pulled from the spaces through return air vents in the ceiling.” See col. 6, lines 6-9 and lines 26-27 of Reese. Secondary air is air selectively drawn from one space or zone (e.g., with a lower contaminant level) and provided to another space or zone (e.g., with a higher contaminant level). See col. 6, line 63 to col. 7, line 3 of Reese.

As Applicants explained during the interview, the Reese system in **Mode 1** does not provide independent control of a flow of return air from at least a first room and a second room based on a contaminant level in at least one of the first and second rooms. In fact, in **Mode 1**, Reese does not teach or suggest that there is any control of return air drawn from a specific space or zone that is mixed with other return air and is part of the supply air provided back to the first and second spaces or zones. Rather, the return air drawn from spaces or zones in Reese is drawn without volume or flow control via return vents and ducting to the central air handling and treating unit. During the interview, the Examiner commented that the **Mode 1** operation of Reese, where a mixture of return air from several or all of the spaces is drawn without flow control is conventional. Applicants agree with the Examiner’s observation.

As was also discussed during the interview, the Reese system in **Mode 2** does not provide a common source of supply air, as set forth in claims 1, 18 and 19. Although Reese in **Mode 2** provides for flow control of secondary air transferred from a first space or zone to a second space or zone, the secondary air removed from the first space or zone (whose flow is controlled) is not made part of a common source of supply air that is provided to the ventilated environment, i.e., an environment including at least the first and second spaces or zones. Specifically, the secondary air removed from the first space or zone is not made part of a common source of supply air that is in part supplied to the first space or zone, but instead is provided alone to the second space or zone. Thus, Reese does not teach or suggest, in **Mode 2**, that any portion of a common source of supply air that includes return air drawn from a first and second room is returned to the ventilated environment, which includes the first room.

A third mode of operation, **Mode 3**, was not discussed during the interview because it is a combination of **Modes 1 and 2**, and therefore the same reasons set forth above with respect to

Modes 1 and 2 apply with respect to **Mode 3**. For example, in **Mode 3**, Reese discloses that primary and secondary air may be mixed together and provided to a particular space or zone. See col. 7, line 66 to col. 8, line 19. However, in this mode, Reese still does not teach or suggest that there is any control of return air drawn from a first space or zone that is mixed with other return air and is part of the supply air provided back to the first space or zone. At best, Reese discloses the control of air flow from a first space or zone to a second space or zone, but does not disclose control of return air flow from a first space or zone that is made part of a common source or supply air that is, in part, provided to the first space or zone.

Accordingly, Applicants respectfully request that the rejection of claims 1-27 under 35 U.S.C. §102(b) as anticipated by Reese be withdrawn.

B. Claims 28-30

As previously stated, claims 28-30 are rejected under 35 U.S.C. §102(b) as anticipated by Reese. However, Reese does not teach or suggest all of the limitations of claim 28. Reese does not teach or suggest determining a dilution ratio of at least one of a first flow of first return air and a second flow of second return air to an uncontaminated air flow associated with the supply air provided to the ventilated environment, or determining a threshold value for the contaminant level of the at least one contaminant based at least on the dilution ratio, as set forth in claim 28. For at least this reason, Applicants respectfully request that the rejection of claims 28-30 under 35 U.S.C. §102(b) as anticipated by Reese be withdrawn.

C. Claims 31-39

Claims 31, 34 and 37 each recite controlling a first flow of first return air drawn only from the first room based at least in part on a first air quality in at least the first room, the first return air constituting at least a first portion of the supply air supplied to at least the first and second rooms. As discussed above, Reese does not teach or suggest control of the flow of first return air drawn only from the first room constituting at least a portion of the supply air supplied to at least the first room. In **Mode 1** of Reese, the flow of return air from spaces or zones is not controlled at all. In **Mode 2**, flow of secondary air is controlled, but the secondary air is not made part of supply air that is provided back to the space or zone from which it is drawn. In

Serial No.: 10/619,765
Conf. No.: 8795

- 15 -

Art Unit: 3749

Mode 3, Reese similarly does not control a first flow of return air drawn only from the first room (or space) such that the return air constitutes at least a portion of the supply air supplied to the first and second rooms (or spaces).

Accordingly, Applicants request that the rejection of claims 31-39 under 35 U.S.C. §102(b) as anticipated by Reese be withdrawn.

CONCLUSION

In view of the foregoing, Applicants submit that this application is in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicants' attorney at the telephone number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted,

By: 

Robert E. Hunt, Reg. No. 39,231
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2211
Telephone: (617) 720-3500

Docket No. P0316.70028US00
Date: March 26, 2004
x04/09/04